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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,077	12/03/2001	Bruno Colin	BONN-060	7932

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EXAMINER

QUAN, ELIZABETH S

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 11/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,077

Applicant(s)

COLIN ET AL.

Examiner

Elizabeth Quan

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) ✓
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The disclosure is objected to because of the following informalities: The specification should be divided into the appropriate headings, such as BACKGROUND OF THE INVENTION, SUMMARY OF THE INVENTION, BRIEF DESCRIPTION OF DRAWINGS, DETAILED DESCRIPTION OF THE DRAWINGS, etc. Additionally, the parts of the specification should be placed in appropriate order as designated by the MPEP. For example, the abstract comes after the claims.

Appropriate correction is required.

Claim Objections

3. Claim 9 is objected to because of the following informalities: On line 6, "groove" should be "grooves." Appropriate correction is required.
4. Claim 10 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Since it has already been established in base claim 9 that capillary action is not enabled in the deep groove, it follows that the dimensions/structure/configuration (i.e. width) of the deep groove is such that capillary action is not enabled.

Art Unit: 1743

5. Claim 16 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Since it has already been established in base claim 9 that capillary action is not enabled in the deep groove and the claim is merely renaming the deep groove as the reaction zone, it follows that the dimensions/structure/configuration (i.e. distance) of the deep groove also known as the reaction zone is such that capillary action is not enabled.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 14 is rendered indefinite by the recitation of the deep groove having free ends. The end is surrounded by shallow grooves.

9. Claims 9, 10, 15, and 16 are rendered indefinite by the terms "capillary action is not enabled" since capillary action is enabled to some extent. The terms have been interpreted as low capillary action for examining purposes.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1743

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,279,791 to Aldrich et al.

Aldrich et al. disclose an apparatus comprising at least one planar surface (30) wherein at least two compartments (10,60,62,25) are located and defined by a partition (20) (FIG. 5). The compartments, which create a space for making it possible to displace a liquid sample, comprise two different types of grooves including a deep groove (60) and shallow grooves (10,62) (FIG. 5; COL. 3, line 35-COL. 6, line 63). The deep groove is capable of partitioning samples by having the deep groove sufficiently deep in relation to the partition such that capillary action of a sample is not enabled (COL. 3, line 35-COL. 6, line 63). Since the deep groove is itself non-capillary, the width of the deep groove supports the non-capillary nature of the deep groove (COL. 3, line 35-COL. 6, line 63). The shallow groove is capable of receiving a sample by having certain depth in relation to the partition such that capillary action is enabled (COL. 3, line 35-COL. 6, line 63). The two different types of grooves make it possible to direct sample movements by altering the orientation of the apparatus (COL. 3, line 35-COL. 6, line 63). The shallow grooves are adjacent to the deep groove such that the deep groove is positioned between two shallow grooves (FIG. 5).

12. Claims 9-16 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,286,454 to Nilsson et al.

Nilsson et al. disclose an apparatus comprising at least one planar surface (10) wherein at least two compartments (12,30,14) are located and defined by a partition (11) (FIGS. 2 and 7). The compartments, which create a space for making it possible to displace a liquid sample,

Art Unit: 1743

comprise two different types of grooves including a deep groove (14) and shallow grooves (12,30) (FIGS. 2 and 7; COL. 3, lines 25-29, 39-43, and 50-55; COL. 6, lines 35-38). The deep groove is capable of partitioning samples by having the deep groove sufficiently deep in relation to the partition such that capillary action of a sample is not enabled (COL. 3, lines 25-29, 39-43, and 50-55; COL. 6, lines 35-38). Since the deep groove is itself non-capillary, the width of the deep groove supports the non-capillary nature of the deep groove (COL. 3, lines 25-29, 39-43, and 50-55; COL. 6, lines 35-38). The shallow groove is capable of receiving a sample by having a certain depth in relation to the partition such that capillary action is enabled (COL. 3, lines 25-29, 39-43, and 50-55; COL. 6, lines 35-38). The two different types of grooves make it possible to direct sample movements by altering the orientation of the apparatus (COL. 3, lines 25-29, 39-43, and 50-55; COL. 6, lines 35-38). The shallow grooves are adjacent to the deep groove such that the deep groove is positioned between two shallow grooves (FIGS. 2 and 7). The shallow grooves each meet the deep groove via respective outlet channels to create a reaction zone where at least two liquid samples may be brought together (COL. 3, lines 25-29, 39-43, and 50-55; COL. 6, lines 35-38). Since the reaction zone is the intersection at which the deep groove meets or overlaps with the shallow grooves, the reaction zone may be considered both capillary and non-capillary.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They include one or more limitations in the claims.

Art Unit: 1743


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Quan whose telephone number is (703) 305-1947. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (703) 308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Elizabeth Quan
Examiner
Art Unit 1743

eq


Jill Warden
Supervisory Patent Examiner
Technology Center 1700